Psychology and Global Climate Change

Many psychologists are invested in applying the results of their research to address and ameliorate social problems. This statement aims to bring attention to the connections between psychology and climate change, and to initiate dialogue and encourage collaborative efforts to address this social and ecological issue.

**Climate change** is likely to have a major impact on people across the globe. The physical characteristics of climate change are defined in terms of changes in averages and variability of, for instance, temperature, precipitation, and wind over the course of an extended period of time (decades or longer). However, climate change also involves imbalances in ecosystems, threats to public health, alterations to community structures, and impairment of individual psychological well-being. Psychological research is necessary in order to understand the implications of climate change for psychological functioning and well-being and for intergroup relations. Psychological responses such as assessments of justice, attributions of responsibility, and fears about one’s own vulnerability and status, affect reactions to climate change policies. Psychology can help to explain why some deny that climate change is occurring and/or engage in environmentally destructive behaviors, as well as to design effective strategies that reduce behavioral contributions to climate change and help people cope with the psychological and social impacts of climate change.

**Psychological and social impacts of global climate change.**

Global climate change is projected to have a wide range of effects on humans. Direct physical impacts may result from extreme weather events, depletion of food and water, and exposure to vector-borne diseases. There are also direct psychological and social impacts, for instance, stress and anxiety from concern about current and projected environmental changes and trauma experienced after extreme weather events, which could include shock or denial immediately after the event or flashbacks or strains in relationships years later.

Second-order impacts may follow due to repercussions of efforts directed at mitigation (attempts to reduce the amount of change) and adaptation (attempts to adjust to change). These impacts include effects on community structure and stability and intergroup relations. For instance, mitigation may involve restrictions on energy use, with consequent perceived decline in standard of living. As part of adaptation, insufficient water available to sustain a local population can result in local cultures changing or even leaving their traditional homeland, in a process called *ecomigration*. At the individual level, the disruption to place attachment may have profound though subtle effects on mental health. Moreover, these displaced communities may not be welcomed by the inhabitants of the areas they move to, as competition over environmental resources and clashes in cultural traditions lead to intergroup tension and possible conflict.

The impacts on humans will be not uniform. The most vulnerable individuals and families will be those without social and financial resources to withstand climate change impacts; that is, the poorest and those who are socially marginalized. Internationally, the poorest countries will be some of the hardest hit, due in part to their lack of resources to prepare for and cope with emerging changes. Their attempts to cope and efforts to help them cope will impact other countries. Variability in impacts will be apparent within countries as well. The differential exposure to impacts highlights social justice concerns. Awareness of the intergroup disparities in impacts, particularly when coupled with the differences in responsibilities for climate change, may also exacerbate hostility between nations and between ethnic groups.
Relevance of psychological expertise
Attempts to respond to climate change should attend to cognitive, affective, behavioral, and social factors in order to comprehend the ways that people understand climate change, to address the causes, and to arrive at an effective response. Psychologists can help 1) assess psychosocial impacts of climate change, 2) design programs that assist individuals in coping with the effects of climate change, and 3) improve the presentation of information to encourage effective responses. Psychological research on prejudice and discrimination can be of great importance in coping with the increased tensions that result from competition over diminishing environmental resources. This could include helping construct contexts that improve the quality of intergroup contact.

Policy efforts will need public support. Lack of support for policies will likely emerge when constituents believe the policies are irrelevant to them. Many people, for example, believe that the impacts of climate change will primarily be felt by other people and at a later time. Lack of support for policies can also emerge when policies are perceived to threaten oneself, one’s membership groups, or the status quo that exists within a society. For example, those who endorse the status quo are likely to prioritize economic development over environmental protection, and those who are more accepting of social hierarchy tend to be less supportive of pro-environmental policies. Further, emotional defenses may lead people to support the current system rather than adjusting to the changes in policy that are necessary to cope with climate change.

Human behavioral changes now can still make a big difference in the amount of climate change that we experience. Psychologists have decades of experience in creating behavior change that can be applied in this context. This includes understanding when and how to utilize external factors, such as prompts, feedback, and incentives. Social norms are a particularly powerful external factor that has been effectively employed to encourage more sustainable behavior. Internal factors such as perceived efficacy, perceived responsibility, and values are also key determinants of the ways in which people use or protect environmental resources.

Psychology can be particularly useful in understanding the ways in which environmentally significant behavior is subject to more subtle influences; the way reactance, for example, can lead a heavy-handed intervention to backfire, fear can increase rather than decrease materialistic consumption, or a public service announcement can inadvertently establish an environmentally destructive social norm. Effective responses to climate change require multidisciplinary efforts. Psychologists, who understand the complex personal, social, and cultural influences on individual behavior and the limitations on human rationality, are important participants in these efforts.

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References available at: http://www.spssi.org/climatechangeref

About SPSSI: The Society for the Psychological Study of Social Issues (SPSSI) is an international group of approximately 3000 psychologists, allied scientists, students, and others who share a common interest in research on the psychological aspects of important social issues. In various ways, the Society seeks to bring theory and practice into focus on human problems of the group, the community, and nations, as well as the increasingly important problems that have no national boundaries.